

GCSE Physics P8 Forces in Balance

What are we learning?	What knowledge, understanding and skills will we gain?	What does excellence look like?	What additional resources are available?
<p>The resultant effect of forces on the motion and stability of objects</p>	<p><b>Knowledge</b></p> <ul style="list-style-type: none"> <li>• Give examples of vectors and scalars</li> <li>• Be able to list a variety of forces and apply these appropriately to a force diagram</li> <li>• Define centre of mass and be able to find it using lines of symmetry</li> </ul> <p><b>Understanding</b></p> <ul style="list-style-type: none"> <li>• Compare vectors and scalars</li> <li>• Be able to calculate resultant forces and describe the overall effect of these on motion.</li> <li>• Describe an investigation to determine the centre of mass of an object</li> <li>• Use centre of mass to determine the stability of an object</li> </ul> <p><b>Skills</b></p> <ul style="list-style-type: none"> <li>• Find solutions that require the use of multiple equations</li> </ul>	<p>Apply knowledge from particle model and moments to explain why objects have a point at which the mass seems to act.</p> <p>Plan a detailed investigation into the stability of three-dimensional objects.</p> <p>Plan a detailed investigation into the effect of increasing the gradient of a slope on the component of the weight acting along the slope.</p>	<p>BBC Bitesize</p> <p>Doddle – power points and quick quizzes</p> <p>You tube: ‘Free science lessons’</p> <p>Seneca learning platform</p>

